THE



GARDENERS' CHRONICLE

A Meckly kllustrated Journal

of

HORTICULTURE AND ALLIED SUBJECTS.

(ESTABLISHED IN 1841.)

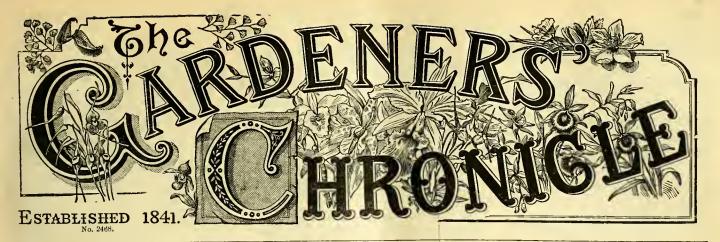
VOL. III.-THIRD SERIES.

JANUARY TO JUNE, 1888.



LONDON:

41, WELLINGTON STREET, COVENT GARDEN, W.C. 1888.



No. 68.—Vol. III. (THIRD SERIES.)

SATURDAY, APRIL 14, 1888.

[Regt. as a Newspaper, PRICE 3d. Post-Free, 34d.

CONTENTS.

Acton regreation-ground	461;	Hardy fruit garden	463
Amaryllis as winter-		Hop-farmers	470
bloomers	467	Kitchen garden	463
Anthurium Chambe		Larch, weeping	469
laini	462	Lethorion	469
Aucuba cuttings, striking	470	Lime for stone-fruit trees	469
Begonias	469	Lissochilus giganteus	462
Books:—	100	Mulching	469
Annals of Botany	467	Narcissi, Portuguesc	457
Pflanzenleben	467	Obituary	471
Botanical Magazine	466	Orchid notes	463
	457	Orchids at Sir T. Law-	102
Bulb garden, the	301	reace's	462
Covent Garden Lifeboat	466	Panshanger, flowers at	460
Fund			464
Crocuses, vernal	457	Paris exhibition	457
Cypripedium Rothschild-	4	Phalæoopsis Leda	466
ianum	457	Planchoo, the late M	
Daffodil names	469	Plants and their culture.	466
Encalyptus urnigera	460	Roses, massing of	459
Ferns, crossing of	457	,, neglected	459
Flower garden, the	463	Royal Horticultural So-	
Foreign Correspondence	460	ciety 464, 466, 468	, 470
Forestry School, the, at		Societies, reports of :-	
Cooper's Hill	4.10	Linuean	471
Fruits, copyright in	460	Boyal Horticultural	471
· u under glass	463	Stachys tuberifera	469
Gardening appointment		Trees and shrubs	
Gaent	461	Veitch & Son's aursery ,	

ILLUSTRATIONS.

Anthurium Chamberlaini ,, habit of Elenlyptus urnigera branch ,, tree at Prestonkirk	 	 :	 465 464 460 461

Back Numbers of the "Gardeners' Chronicle." NOTICE.—All Back Numbers of the "Gardeners' Chronicle" are now 3d, each.

Advertisers are specially requested to note, that, under no circumstances whatever, can any particular position be guaranteed for ad-vertisements occupying less space than an entire column.

NOTICE TO SUBSCRIBERS.—All Numbers of the "Gardeners' Chronicle" from January 1, 1887, are still to be had.

TARNINGHAM ROSE and HORTICUL-TURAL SOCIETY. The ANNUAL EXHIBITION will be held on THURSDAY, July 5. Schedules and Entry Forms of

W. AND J. HODSOLL, Hon. Secs., Farningham.

TUONYMUS.—20,000: all nice bushy well grown specimens, 9 to 30 inches, 15s. to £7 per 100; J. J. CLARK, Goldstone Farm, West Brighton.

FOR SALE or OFFER, 20 lb. of MILES' SPIRAL MIGNONETTE SEED. Very true. Apply VIGOR BROS., Withdean Nursery, Brighton.

To the Trade.

FERN SPORES (SEEDS), many named varieties; also collections of sume in 12, 13, and 24 sorts. LIST free by post on application.
WATKINS AND SIMPSON, Seed and Bulb Merchants, Exeter Street, Strand, London, W.C.

Verbenas-Verbenas,

Verbenas - Verbenas,
WILLIAM BADMAN offers clean, healthy,
well-rooted VEREBNAS, at 6s, per 100; 50... per 1000,
Purple, White, Scarlet, Rose, and Crimson; or, 1000 Choice
Named Sorts for 8s., at post-free 3d. per 100 extra. Packing
included. Terms cash.

Cemetery Nursery, Gravesend.

A DIANTUM CUNEATUM, Maidenhair Ferns in thumbs, strong healthy plants at 16s, per 100. Seedlings out of boxes far per 100, br cash with order. Thousands to select fr. m.—T C. ROSE, Oaklield Nursery, Hampton-on-Thames.

The Best Present for a Gardener.

VINES and VINECULTURE.

The most complete and exhaustive Treatise of Grapes and their Culture ever published.

New Edition.

Price 5s., post-free 5s. 6d.

A. F. BARRON, Royal Horticultural Society, Chistick.

ABIES DOUGLASII, 10 to 15 incles, 6s.

per 100; 15 to 18 inches, 10s. per 100; 1½ to 2 fet. 16s.
per 100; 2 to 3 feet, 30s. per 100; 3 to 4 feet, 35s. per 10; 4 to
5 feet, 45s. per 100; 6 feet, 60s. per 100.

GARLIES MITCHELL, Nurseryman, Stranfaer

Cheap Roses.

EWING'S CARRIAGE and PACKAGE REE collections are now specially worth attentid. The plants are healthy, uninjured by frost, well ripened, andardy, having been grown in an open position, near the set Full particulars gratis and post-free.

EWING AND CO., Sea View Nurseries, Havant, Hamhire.

A Few Large Healthy

A L M S, 3 to 5 feet high, for immliate
disposal — Latania borbonica, Seaforthia egans,
Chamærops excelsa, and Phenia reclinata—from 10s. p pair.
GARDENER, Holly Lodge, Stamford Hill, London.

Spring, 1888.

CHARLES TURNER'S Geners and Descriptive CATALOGUE of New Florist Flowe, &c., is now ready, and can be had free on application.

The Royal Nurseries, Slough.

STANDARD LAURUSTINUS.—Stems 1 to 3 ft. high, heads 2 ft. through, full of Flower. CLARKE'S Nursery, Wellington, Somersetshire

GRAPE VINES, Foster's Seedling and ther varieties, in superb Fruiting Canes; ROSES ilpots, SEARALE, ASPARAGUS, STRAWBERRIES, Broadaved PRIVET.
WILL TAYLER, Osborn Nursery, Hampton, Middlex.

MIOICE FLOWERS and FRUIT.—Hhest

Market Prices gnaranteed. Empties free.
WISE AND RIDES. Covent Garden, W.C.

EO. CLARKE AND CO., Covent Gden
Flower Market, are open to RECEIVE CHOICIUT
FLOWERS in any quantity. Highest Market Prices retned.
Remittances daily, or weekly, or as desired by sender.
Address, 3, Conduit Court, Covent Garden, W.C.

OUELCH AND BARNHM, M, North Row, Covent Garden, W.C., are OPEN TDIS-POSE OF any quantity of MUSCATS and BLACK GRESTOMATOS, CUCUMBERS, FRENCH BEANS, SAW-BERRIES, CHOICE FLOWERS, &c. Highest Marketices obtained. Account Sales daily; Cheques weekly or as prired by Sender. Baskets and Labels supplied. Enferences gn.

MESSRS. GREGORY AND EVAS,
NURSERYMEN, Sideup, and 285, 286, 287, 288, wer
Market, Covent dardeo, W.C., are open to REIVE
CONSIGNMENTS of Choice CUT FLOWERS in any quity
for their Commission Department. Eoxes and Labels s

WANTED, WHITE CUT FLOWERS, any quantity. Also LOBELIA FULGENS, and ROPEOLUM VESUVUS. Quote price and quantity to spose of to G. PHIPPEN, Reading.

WANTED, SEEDS of Hollies, Larch, vergreen Oaks, and Austrian Pine. State quan and price to R. G. NASH, Seamount. Howth. Co. Dublin.

WANTED, HOLLY TREES, ER-TREES, State height end price per 100. Write YOUNG, S. Victorin Street, Westminster, S.

WANTED, JERUSALEM ARTICHIES.

Send price and quantity to

SQUELCH AND BARNHAM, Salesmen, Coventarden
Market, W.C.

WANTED, RHUBARB ROOTS. Quity. State variety and lowest cash price to HENRY ROGERS, Fruiterer, Heref

NOW IS THE BEST TIME TO PLANT

THE GOLDEN-RAYED LILY.

CARTERS' LAST CONSIGNMENTS of the GOLDEN-RAYED LILY of JAPAN, LILIUM AURA-TUM, have arrived direct from the Japanese Lily Farms, Selected Bulbs of this charming hardy Lily are obtainable at the following low prices, direct from the Importers, plump and sound as English-grown Roots. Prices, 4s., 6s., 9s., 12s., 18s., and 24s. per dozen, carriage free. Cases as imported, containing 100 choice Bulbs, price 40s.; sent free to any railway station in England and Wales, on receipt of cheque or P.O.O.

ARTERS', Royal Seedsmen by Sealed War-rants, 237 and 238, HIGH HOLBORN, LONDON, W.C.

To the Trade.

RESH PALM SEEDS.—Write for Special Low Offer of all the leading kinds to H. DAMMANN, Jun., Breslan, Germany.

500 BRILLIANT SCARLET GLADIOLI, OUU fine Bulbs, for Beds, Borders, or Massing for Autumn Effect. Sent free on receipt of P.O.O. for 21s. BARR AND SON, 12 and 13, King Street, Covent Garden, W.C.

FINEST LILY OF THE VALLEY
CROWNS for Early Forcing, by Gustav A. Schultz,
Berlin. For price write to
JACOB AND VALENTIN. 56, Cheapside, London, E.C.

CARNATION "GLOIRE DE NANCY," without doubt the grandest Carnation ever sent out for Cut as well as Conservatory and the Open Border. Flowers from 2 to 3 inches across, pure white, and strong Clove-acented. More robust than the old red Clove, and freer. Good rooted Layers, 25s. per 100, 15s. for 50, 8s. for 25. Cash with order.—E. COLLINS AND SONS, Cumberland Park Nursery, Willesdea Junction, London, W.

Begonias a Specialty.

AING'S BEGONIA SEED.—Awarded Four Gold Medals. Saved from Prize Plnots. Unequalled quality. Choice mixed, Single or Double varieties, 1s., 2s. &d., and 5s. per packet. Collections—Single, 12 named varieties, separate, 5s. &d.; 8 ditto, 3s. Order direct from us, to procure the genuina seed. The best and cheapest combined procurable. JOHN LAING AND SONS, Seedsmen and Begonin Growers, Forest Hill, S.E.

A L P I N E and H A R D Y
PERENNIALS.

CATALOGUE, with Cultuml Notes and New Supplementary
List, free. 100 ALPINES, our selection, 25x.
100 SAXIFRAGES, 100 sorts, 25x,
STANSFIELD BROTHERS, Southport.

STRAWBERRIES FOR FORCING.—Apply for LOVEL'S SELECT LIST of STRAWBERRY RUNNERS for 1883, with Prices; or send 3d. for Sample of Plants and Pamphlet. Runners ready in July. Great demand. Book early.—W. LOVEL AND SON, Strawberry Growers, Driffield.

GRAPE VINES, most excellent Canes, best varieties, 3s, 6d., 5s., 7s, 6d. Descriptive LIST Free. RICHARD SMITH AND CO., Nurserymen and Seed Merchants, Worcester.

Extra Strong Fruiting Vines.

I.A.NE AND SON can still offer wellripened extra strong Canes for Fruiting in Potster's Seedling, Gros Colmur, Alawick, Gros Maroc, &c., and Planting Canes

The Nurseries, Berkhamsted, Herts.

Change of Seed of True
VILLAGE BLACKSMITH POTATOS,
growe on Lord Yarborough's Estate, near Brigg, Lincolnshire. Price 2s. 6d, per stone; 16s, per cwt. Cash with
order. J. E. DIXON, Seed Grower, Gainsborough.

H. LASCELLES AND CO.,
HORTICULTURAL BUILDERS,
BUNHILL ROW, LONDON, E.C.
Plans and Estimates Free.
See large Advertisement, April 7, page 423,

NEW OR NOTEWORTHY PLANTS.

CYPRIPEDIUM ROTHSCHILDIANUM n. sp.*

This very surprising plant appears to be the nearest ally to Cypripedium præstans. Its leaves are unusually long, more than 2 feet in length, 21 to 3 inches in width, green, glossy, very strong. The pedancle is said to be three-flowered, but may become more florid later. It is reddish with few very short hairs. The green bract is spathaceous, not equal to half the stalked glabrons ovary, and has a few dark longitudinal stripes at the base. The fresh flower at hand is much smaller than my wild ones, which are quite equal to those of the best of its Papuan consort, Cypripedium præstans. Odd sepal cuneate oblong acute, yellowish, with numerous longitudinal dark, almost blackish, stripes, also white at the borders. Lateral sepals united into one nearly equal smaller shorter body. Petals undulate at the base, linear, narrow at the top, yellowish-green with dark longitudinal lines, and dark blotches at the base. Lip like that of C. Stonei and C. præstans, very strong, almost leathery, cionamon-colored, with ochre border to the mouth, and with an ochre-coloured mid-line underneath. The most peculiar point is the staminode. It is quite novel. It has a stout base, and rises erect, bending down into a beak-like, narrow process, covered partly with hairs. These hairs consist of rows of cells, and the cells have several girdles of numerous tubercles in their circumference. The numerous hairs are thicker, and white at the top. This stamioode looks much like the throat and head of some bird, such as a crane.

It is one of the most astonishing introductions we have ever seen, and is due to the indefatigable zeal of Mr. F. Sander, who is desirous that it bear the name of Baron Ferdinand de Rothschild, of Aylesbury. This I accede to with great satisfaction. H. G. Rehb.f.

PHALENOPSIS LEDA, n. hyb.

This attractive novelty has just reached me from Messrs. James Veitch & Sons, of Chelsea, in whose nursery it was raised. The plant is a stray seedling, detected about seven years ago growing in a pot in which no other Phalænopsis seed had been sown, so that nothing certain is known of its parentage. It has at present three elliptical-oblong deep green leaves, the last developed being 6 inches long. flower is over 21 inches across, much resembling P. amabilis (P. grandiflora, Lindl.) in shape, and having some yellow at the base of the front lobe of the lip and on the front margin of the side lobes, which points out that species as almost certainly one of the parents. The tendrils are broadly anchor-shaped, like those of P. Stuartiana X, but a little more elongated, while on the inner half of the lateral sepals near the base are some purple spots, both of which point to this or some hybrid of P. Schilleriana and P. Aphrodite as the other parent. Nothing else would account for the anchor-shaped tendrils, unless, of course, P. Schilleriana itself, and the green leaves are more against this than against some bybrid which had already half blood of a green-leaved species in it. P. rosez seems out of the question. for with P. grandiflora it would give a hybrid much like P. intermedia X, and this, with P. grandiflorn, gave P. F. L. Ames, with the tendrils quite narrow at the base, as would indeed be expected. The side lobes of the lip are of the usual shape, but not pointing a little backward, as in P. Stuartianax, and with a few very distinct purple spots below the middle, and a few bars of the same colour on the stalk of the lip. Crest yellow, with purple spots, as in P. Stnartisna X. Front lobe of lip densely covered with minute duts of rosy tint, its apex and the tendrils pure white. It is as handsome as others of

the group, which, except in the characters I have pointed out, it closely resembles. If I have interpreted its characters aright, the blood of three distinct species, viz., P. grandiflora, P. Aphrodite, and P. Schilleriana, are represented in it. R. A. Rolfe.

THE BULB GARDEN.

PORTUGUESE NARCISSI.

Kindly permit me to point out an error in a note under the above heading at p. 433. It is there stated that "N. cyclamineus was described by Parkinson in 1640, and figured in Rudluck, Theat, Flor., 20." Now as a fact, Parkinson does not mention N. cyclamineus neither in his Paradisus (1629—56) nor in his Theatrum Botanicum of 1640. The fact is, N. cyclamineus is figured by P. Vallett in the Jardin du Roy, Paris, 1623, and in the anonymous Theatrum Floræ of 1633. The last-named folio was first published in 1622, but I have not seen that edition. It seems probable that this book contains the earliest figure published of this remarkable plant.

. The Rudbecks, father and son, published figures of many Narcissi in their great and now rare Campi Elysii, 1701, but I need scarcely say that they had nothing to do with the rare folio, Theatrum Floræ of 1622-33—a work quite unique in its way, and remarkable for the fine bold and free drawings it contains.

Dean Herbert and Haworth are primarily answerable for confounding or connecting the *Theatrum Floræ* with Rudbeck's name, and at a later date the book became confounded in a similar manner with Parkinson's *Theatrum Botanicum*, in which Narcissi are not even mentioned, as I believe.

I have paid much attention to the literature of the Narcissus, and spent days last year in the British Museum in looking over and tracing figures from the Campi Elysii and other rare works. I also especially visited the Sherardian Library at Oxford, wherein Professor Bayley-Balfour most courteonsly showed me beautiful copies of the Jardin du Roy, Theatrum Floræ, and the nnique copy of the Campi Elysii, and other rare books, which I should recommend visitors to the Oxford garden to see for themselves if at all interested in botanical literature.

Having been the first person, as I believe, in modern times to allude to the anthenticity of the old portraits of Narcissus cyclamineus, I also suggested its being possibly still in existence in the Gardeners' Chronicle, 1885, December 19, pp. 789-790, where I observed, prior to the re-discovery of the plant near Oporto in 1886:-"This is such a curious thing, that I give a small tracing of the flower (fig. 185), in the hope that some modern groper after old Daffodils may recognise this as an old friend, if he should perchance meet with it in his rambles during the next spring," As a matter of fact, A. W. Tait, Esq., and his aide-de-camp, Mr. Johnstone. did find it near Oporto "during the next spring," and I regard myself as its godfather in a way, and feel quite proud in having been instrumental in getting the hardy little foundling rechristened in the Botanical Magazine, t. 6950.

Both Haworth and Herbert were weak in their literary knowledge of the Narcissi, and hoth were mainly dependent on the late Rev. H. G. Ellacombe, of Bitton, for cultivated specimens. F. W. Burbidge, F.L.S.

VERNAL CROCUSES.

Despite the weather—which has been of a character to seriously impair the heauty of the flowers—the spring Crocuses are very fine this year. The yellows are always the earliest to bloom, and what a wealth of blossom they give. About seven years ago I planted some clumps of the common yellow Crocus in a bed on a north aspect, and the bulbs have so increased that they have grown into large size, and bloom a week or two later than those on the south side. I placed among them, so as to fill a circular bed, some clumps of the Siberian Squill, and I made a permanent edging of white striped and blue Crocuses. This

hed is now a charming floral picture, only that the cold north-easterly wind detracts from rather than adds to the beauty of the blossoms. For massing and for making permanent lines the following are the best varieties of Crocus, viz., the Large Yellow, which should be plentifully used both for the sake of its earliness and also for its rich golden colour; David Rizzio, blue-purple; Ne Plus Ultra blue, edged with white; Pride of Albion, heavy violetstriped; Sir Walter Scott, light violet-striped; and Mont Blanc, white. These are all good old standard sorts of great heanty and usefulness, producing freely large blossoms. There are other varieties of more recent introduction, but those I have named can be depended upon. Early planting is a matter of importance. Crocuses can be had by the first week in September, and they should be planted by the end of October. R. D.

THE CROSSING OF FERNS.

(Concluded from p. 426.)

HYBRIDISATION.

A year or two since I was told by one of the most discriminating botanists, Mr. Churchill, that it was now accepted that Asplenium germanicum was a hybrid between A. septentrionale and A. rntamuraria; and as Mr. G. B. Wollaston, of Chiselhurst, facile princeps among British fernists, is entirely of the same opinion, the idea cannot be lightly regarded. I am told that A. germanicum is never found where A. septentrionale and A. rntamuraria are not found, and that where these two species abound it is very rare not to find A. germanicum -that it is never found extending over a considerable space as ordinary species do, more or less, but in detached clumps or isolated plants as hybrids, having a difficulty in reproducing themselves, might be expected to do. It is reputed to be barren, and yet it is on record that Sim of Foot's Cray once raised a variety from it, recorded as "acutidentatum" both by Mr. Moore and Mr. Wollaston; it cannot therefore be said that it is impossible that a spore might not be thrown from one of such hybrid plants with sufficient constitution and general fitness for survival to establish a new race. There is also the case of Lastrea remota, of which four plants were found growing in a clump in Westmoreland, by Mr. F. Clowes, about thirty years ago; nor has it been found elsewhere in this country; it has long been accepted by British fernists as a natural hybrid; though apparently profusely soriferous, it has, after what might have been considered exhaustive experiments, been considered incapable of reproducing itself from spores, and yet it is, I believe, sufficiently established that one of the original plants which Mr. Stansfield has, did once cover the pot in which it was with fertile spores and though the young plants may not yet be in every respect entirely like the parent, they are, I believe, sufficiently unlike every other British Fern to prove their origin: and would it not be unreasonable to conclude that not one of these could have power to reproduce itself with ordinary freedom?

The remarkable "confluent" forms of Aspleniam Trichomanes, as fertile in appearance as they have hitherto shown themselves to be barren in reality, are considered by those who have most studied the subject to be hybrids, as are also the "microdon" forms of A. Adiantum nigrum and A. lanceolatum. There is also the unique cruciate Asplenium, which appeared self-sown in Mr. Clapham's fernery, and the remarkable hybrid Asplenium found by Mr. Wullaston in Switzerland. There are two or three other forms marked apparently with the bar sinister, but I pass to less donbtful cases.

To Mr. E. J. Lowe is due the credit of having been the first to raise an numistakable hybrid between two acknowledged species, which was neither a monster of ngliness nor incapable of reproducing itself from spores. It was no accident, for with deliberate intent Mr. Lowe set himself to produce a cruciate Polystichum aculeatum by crossing a very narrow cruciate

[&]quot;Cypripedium Rothschildianum, n. sp.,—Affine Cypripedio præstanti: peduaculo minute velutino; sepalis oblongis acutis margine ciliolatis; tepalis basi undulatis linearibus antrorsum attenuatis, labellum ultra bis superantibus; labello coriaceo bene angulato, calcei ore retuso; staminodii petiolo crasso, corpore lineari deflexo, superficie hino capitato pilosa. Ex insulis Papuan. imp. exc. Sander. II. G. Rchb. f.